

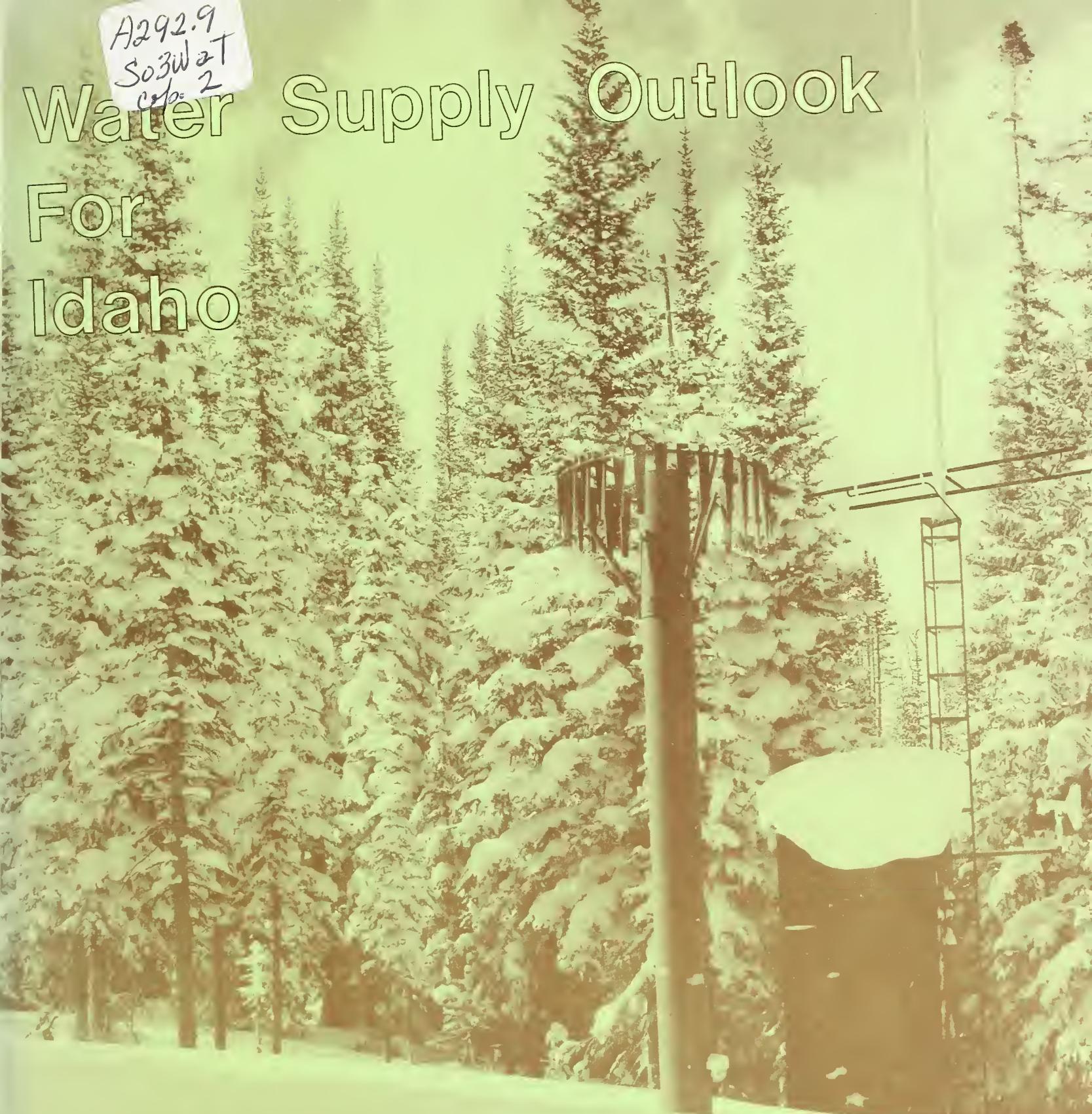
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Water Supply Outlook For Idaho



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

Cooperating with

IDAHO DEPARTMENT OF WATER RESOURCES

AS OF
JUNE 1, 1979

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO: VIEW OF A SNOTEL DATA SITE IN THE SNOWY RANGE IN WYOMING. TALL CYLINDRICAL DEVICE IS A PRECIPITATION GAGE. SNOW PILLOWS ON THE GROUND NOT VISIBLE DUE TO SNOW COVER. SHELTER HOUSE, ANTENNA TOWER, ANTENNA, AND TEMPERATURE UNIT ARE VISIBLE BEHIND THE PRECIPITATION GAGE.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, West Technical Service Center, Room 510, 511 N.W. Broadway, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	Room 129, 2221 East Northern Lights Blvd., Anchorage, Alaska 99504
Arizona	Room 3008, Federal Building, 230 N. First Ave., Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno, Nevada 89505
Oregon	1220 S. W. Third Ave., Portland, Oregon 97204
Utah	4420 Federal Bldg., 125 South State St., Salt Lake City, Utah 84138
Washington	360 U. S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Snow Surveys Branch, California Department of Water Resources, P.O. Box 388, Sacramento, California 95802 --- for British Columbia by the Ministry of the Environment, Water Investigations Branch, Parliament Buildings, Victoria, British Columbia V8V 1X5 --- for Yukon Territory by the Department of Indian and Northern Affairs, Northern Operations Branch, 200 Range Road, Whitehorse, Yukon Territory Y1A 3V1 --- and for Alberta, Saskatchewan, and N.W.T. by the Water Survey of Canada, Inland Waters Branch, 110-12 Avenue S.W., Calgary, Alberta T3C 1A6.



WATER SUPPLY OUTLOOK FOR IDAHO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued by

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WATER SUPPLY OUTLOOK for IDAHO



GENERAL SUMMARY FOR JUNE 1, 1979

Water supplies for Idaho are forecast to be generally adequate for the 1979 irrigation season, however, good water management practices will be necessary in many locations to stretch the supply as much as possible.

Precipitation for the month of May was generally below average and temperatures were near normal. Warm spells followed by cold periods resulted in an orderly snow melt however the below normal snow pack in most areas did not produce as much runoff as would have occurred with an accelerated snow melt.

Due to early irrigation demands and below normal flows some reservoirs may not fill as anticipated in earlier reports.

This report carries the June 1 and supplemental measurements for 1979 and corrections of previously published 1979 data.

RESERVOIR STORAGE

USABLE CONTENTS (1,000 Acre Feet)

JUNE 1, 1979

50 0 50 100 150
SCALE IN MILES

Contents
RESERVOIR
Capacity

1076.9
PEND OREILLE
1155.1

236.2
COEUR D'ALENE
225.1

135.9
DEADWOOD
161.9

533.9
CASCADE
653.2

963.5
BROWNLEE
980.2

714.4
OWYHEE
715.0

127.0
LAKE LOWELL
169.0

265.3
LUCKY PEAK
278.2

221.2
ARROWROCK
286.6

423.3
ANDERSON RANCH
423.2

325.7
NOXON
334.6

2927.0
HUNGRY HORSE
3428.0

1527.0
FLATHEAD LAKE
1791.0

1906.7
DWORSHAK DAM
2016.0

44.5
MACKAY
44.2

115.2
ISLAND PARK
127.0

15.2
GRASSY LAKE
15.2

569.9
JACKSON LAKE
847.0

1048.1
PALISADES
1200.0

1501.3
AMERICAN FALLS
1700.0

1134.2
BEAR LAKE
1421.0

27.8
LITTLE WOOD
30.0

163.0
MAGIC
191.5

85.1
SALMON FALLS
182.6

50.3
OAKLEY
74.4





SNOW

DRAINAGE BASIN and or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

JUNE 1, 1979 MEASUREMENTS

Atlanta Summit	7500	5/30	19	8.0	30.7	20.5*
Bear Canyon	7920	6/1	0	0.0	6.2	4.1*
Big Creek Summit	6600	5/30	26	13.0	29.6	18.6
Bogus Basin	6340	5/30	0	0.0	0.0	3.5*
Breezy Saddle	5000	5/30	0	0.0	--	--
Brundage Mountain	7560	5/29	45	21.8	46.8	36.9*
Coolwater Mountain	6200	5/30	30	12.8	21.0	16.4*
Copper Basin	7650	6/1	0	0.0	0.0	--
Crater Meadows	6100	5/30	40	22.0	29.6	32.0*
Crawford Ranger Station	4800	5/30	0	0.0	0.0	--
Darby Canyon	8250	6/2	0	0.0	16.6	--
Deadwood Summit	6750	6/3	17	9.2	--	--
Dollarhide Summit	8400	6/1	12	5.1	--	--
Fishpole Lake	9350	6/1	0	0.0	32.2	--
Forty-nine Meadows	4840	5/30	0	0.0	--	--
Freds Mountain	8000	6/2	0	0.0	15.0	--
Galena	7300	5/31	0	0.0	--	2.6*
Galena Summit	8780	5/31	0	0.0	26.2	13.9*
Garns Mountain	8300	6/2	48	23.9	37.7	--
Goat Lake	6500	5/30	60	25.8	40.8	36.8*
Granite Peak	6000	5/30	46	20.6	24.8	31.5*
Hemlock Butte	5500	5/30	46	21.2	24.4	30.9*
Hyndman	7440	6/1	0	0.0	--	--
Indian Meadows	8240	6/2	37	18.6	36.6	--
Jackpine Creek	7350	6/2	0	0.0	0.0	24.1*
Lake Fork	6000	5/27	0	0.0	0.0	--
Lookout	5120	5/30	7	3.7	14.8	15.0*
Lost Lake	6080	5/30	64	28.2	35.8	46.4*
Lost Wood Divide	7900	6/1	0	0.0	11.2	--
Mascot Mine	7760	6/1	0	0.0	0.0	--
McRenolds Reservoir	6800	6/2	0	0.0	--	--
Miles Creek	Wyo. 7300	6/2	0	0.0	--	--
Moores Creek Summit	6100	5/30	10	4.0	17.5	12.5
Pine Creek Pass	6750	6/2	0	0.0	--	--
Schweitzer Bowl	4500	5/25	0	0.0	0.0	--
Schweitzer Ridge	6200	5/25	32	16.7	39.7	--
Secesh Summit	6520	5/31	7	3.5	20.1	--
Shanghai Summit	4600	5/30	0	0.0	--	--
Squaw Meadow	5900	5/31	4	1.7	14.8	15.3*
State Line	6650	6/2	0	0.0	--	--
Stickney Mill	7450	6/1	0	0.0	0.0	--
Trinity Mountain	7780	5/30	23	10.6	36.5	25.7*
Vienna Mine	8950	6/1	34	16.0	37.6	29.4*

(b)1963-77, 15 year period. #Not located directly on this drainage. *Estimated 1963-77 15 year average. (A) Aerial observation Water content estimated (SP) Pressure Pillon snow-water equivalent. (R) Radioactive Gage snow-water equivalent



SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

SUPPLEMENTAL MEASUREMENTSDECEMBER 1, 1978

Kruze Meadows	4800	11/30	13	2.4	--	--
Kruze Meadows	4800	12/5	25	4.7	--	--
Soldier Meadows	4640	11/30	15	2.5	--	--
Soldier Meadows	4640	12/5	27	4.5	--	--
Webb Creek	4720	11/30	14	2.4	--	--
Webb Creek	4720	12/5	25	4.9	--	--
Willow Flat	6100	11/30	19	3.4	3.9	--

DECEMBER 15, 1978

Kruze Meadows	4800	12/19	28	6.0	--	--
Soldier Meadows	4640	12/19	28	6.1	--	--
Webb Creek	4720	12/19	27	6.2	--	--

JANUARY 1, 1979

Bear Creek (A)	Nev.	7800	1/4	24	7.0	10.2	7.8*
Cedar Creek (A)		7000	1/4	21	5.9	4.0	4.4*
Hummingbird Springs (A)	Nev.	8940	1/4	36	9.5	9.5	9.9*
Kruze Meadows		4800	12/29	29	7.0	--	--
Pierce Ranger Station		3170	1/2	27	6.8	6.4	4.2
Soldier Meadows		4640	12/29	30	7.0	--	--
Webb Creek		4720	12/29	27	6.7	--	--
Wilson Creek		7500	1/4	24	5.3	3.5	4.6*

JANUARY 15, 1979

Atlanta Summit		7500	1/17	48	11.6	25.4	--
Bad Bear		5500	1/15	35	7.2	10.8	--
Banner Summit		7040	1/17	46	10.4	--	--
Bogus Basin		6340	1/18	38	9.2	--	--
Bogus Basin Road		5360	1/18	27	7.0	--	--
Graham Guard Station		5690	1/17	31	7.0	15.0	--
Jackson Peak		7070	1/17	45	10.8	24.2	--
Moores Creek		6100	1/15	51	12.3	23.7	--
Mount Baldy		9000	1/15	30	5.0	13.6	--
Pierce Ranger Station		3170	1/15	43	8.9	6.8	--
Trinity Mountain		7780	1/17	56	13.4	33.1	--
Vienna Mine		8960	1/17	55	13.2	28.0	--

FEBRUARY 15, 1979

Atlanta Summit		7500	2/16	70	18.2	37.5	--
Bad Bear		5500	2/14	36	9.5	15.9	--

(b)1963-77, 15 year period. #Not located directly on this drainage. *Estimated 1963-77 15 year average. (1) Aerial observation Water content estimated (SP) Pressure Pillon snow-water equivalent. (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					Average %

FEBRUARY 15, 1979 (Cont'd)

Bogus Basin	6340	2/14	48	13.7	22.8	--
Bogus Basin Road	5520	2/14	25	7.6	10.6	--
Crooked Fork	3600	2/16	40	12.2	--	--
Fish Lake Airstrip	5000	2/18	105	28.7	--	--
Graham Guard Station	5690	2/16	37	10.3	21.2	--
Hemlock Butte	5500	2/19	122	32.8	--	--
Lolo Pass	5240	2/16	86	28.8	--	--
Moores Creek Summit	6100	2/14	64	17.8	34.2	--
Mount Baldy	9000	2/15	44	8.3	23.2	--
Pierce Ranger Station	3170	2/15	38	11.2	9.6	--
Savage Pass	6170	2/20	81	25.3	--	--
Shanghai Summit	4600	2/18	80	21.5	--	--
Trinity Mountain	7780	2/16	78	21.8	44.9	--
Vienna Mine	8960	2/16	72	19.9	37.7	--

MARCH 15, 1979

Above Burke	4100	3/14	54	21.6	20.7	--
Atlanta Summit	7500	3/14	66	21.6	39.5	--
Bad Bear	5500	3/14	36	11.6	16.8	--
Bogus Basin	6340	3/15	53	18.5	26.2	--
Bogus Basin Road	5520	3/15	13	4.6	7.1	--
Breezy Saddle	5000	3/14	77	26.1	--	--
Crooked Fork	3600	3/14	33	11.4	14.4	--
Fish Lake Airstrip	5000	3/14	87	31.5	36.5	--
Forty-nine Meadows	4840	3/14	69	23.7	--	--
Fourth of July Summit	3200	3/13	32	11.6	8.8	--
Galena	7300	3/15	35	10.7	21.2	--
Galena Summit	8795	3/15	42	12.6	25.9	--
Graham Guard Station	5690	3/14	33	11.1	21.7	--
Hemlock Butte	5500	3/14	105	37.1	41.9	--
Jackson Peak	7070	3/14	63	20.5	35.2	--
Lolo Pass	5240	3/14	77	31.1	32.5	--
Lookout	5120	3/14	75	28.8	34.2	--
Lost Lake	6000	3/14	115	38.2	45.9	--
Moores Creek Summit	6100	3/14	64	22.7	36.4	--
Mount Baldy	9000	3/15	42	12.0	26.6	--
Pierce Ranger Station	3170	3/13	32	11.6	10.0	--
Prairie	4900	3/14	16	5.4	4.5	--
Savage Pass	6170	3/14	68	23.4	29.0	--
Shanghai Summit	4600	3/14	66	23.0	23.2	--
Sherwin	3200	3/15	42	15.7	8.7	--
Trinity Mountain	7780	3/14	72	26.5	48.0	--
Vienna Mine	8960	3/14	67	23.5	39.8	--

(b)1963-77, 15 year period. #Not located directly on this drainage. ^Estimated 1963-77 15 year average. (1) Aerial observation Water content estimated (SP) Pressure Pillon snow-water equivalent (R) Radioactive Gage snow-water equivalent

SNOW

DRAINAGE BASIN and/or SNOW COURSE		THIS YEAR			PAST RECORD	
		Date of Survey	Snow Depth (Inches)	Water Content (Inches)	Water Content (inches)	Last Year
NAME	Elevation					

APRIL 15, 1979

Atlanta Summit	7500	4/17	70	25.3	38.7	--
Bad Bear	5500	4/16	18	7.3	8.1	--
Bogus Basin	6340	4/13	61	23.5	--	--
Bogus Basin Road	5520	4/13	0	0.0	--	--
Galena	7300	4/17	32	11.6	19.6	--
Galena Summit	8795	4/17	56	17.3	28.9	--
Graham Guard Station	5690	4/17	21	7.4	13.9	--
Jackson Peak	7070	4/17	64	22.6	35.6	--
Lookout	5120	4/13	81	35.3	30.3	--
Moores Creek Summit	6100	4/16	63	24.0	35.9	--
Mount Baldy	9000	4/13	53	15.1	27.2	--
Pierce Ranger Station	3170	4/16	17	6.6	0.6	--
Prairie	4900	4/15	0	0.0	0.0	--
Trinity Mountain	7780	4/17	78	30.2	48.2	--

MAY 15, 1979

Atlanta Summit	7500	5/14	55	23.8	35.1	--
Bogus Basin	6340	5/15	30	14.0	14.0	--
Lookout	5120	5/14	39	20.0	22.5	--
Moores Creek Summit	6100	5/15	44	19.6	26.7	--
Trinity Mountain	7780	5/13	62	28.2	44.5	--
Vienna Mine	8960	5/14	65	29.4	44.3	--

CORRECTIONS TO PREVIOUSLY PUBLISHED 1979 DATAJANUARY 1, 1979

Aspen Grove	6600	1/6	28	5.0	4.2	--
Henry Creek	5650	1/6	14	2.2	--	--

APRIL 1, 1979

Cedar Creek (A)	7000	4/8	30	9.8	7.7	10.0
Wilson Creek (A)	7500	4/8	36	12.0	12.7	11.9

Agencies and Organizations Cooperating in Idaho Snow Surveys

GOVERNMENT AGENCIES

States:

Idaho Department of Water Resources
State of Idaho Department of Fish and Game
University of Idaho
Idaho State University
Montana Agricultural Experiment Station
Montana State Water Conservation Board
Montana Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon Cooperative Snow Surveys
Oregon State Engineer and Corps of
State Watermasters
Utah Cooperative Snow Surveys
Wyoming Cooperative Snow Surveys

Federal:

U.S. Army Engineers
U.S. Department of Agriculture
Forest Service
Agricultural Research Service
Statistical Reporting Service
U.S. Department of Commerce
NOAA, National Weather Service
U.S. Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Water Resources Division, Geological Survey
National Park Service
Bureau of Land Management

PUBLIC UTILITIES

The Montana Power Company
Washington Water Power Company
Idaho Power Company
Utah Power and Light Company

ORGANIZED PUBLIC AGENCIES

Big Lost River Irrigation District
Blaine Soil Conservation District
Boise Project Board of Control
Idaho Water District #01
Little Wood River Irrigation District
Mann Creek Irrigation District
Salmon Falls Creek Irrigation Company
Twin Falls Soil Conservation District
Big Wood Irrigation Company
Owyhee Project - North & South Board of Control
Valley Soil Conservation District
Portneuf Soil and Water Conservation District

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

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with the Snow Survey"

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